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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,573	12/07/2000	Julie Rac Kowald	169.1918	9630

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EXAMINER

AHMED, SAMIR ANWAR

ART UNIT PAPER NUMBER

2624

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/730,573

Applicant(s)

KOWALD, JULIE RAE

Examiner

Samir A. Ahmed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 12/23/2004 has been entered.

2. The amendment filed 12/23/04 have been entered and made of record.

3. Applicant's arguments filed 12/23/04 have been fully considered but they are not persuasive for the following reasons:

Applicant alleges, "Applicant notes that [,]" (page 24, lines 15-20). The Examiner disagrees. Firstly, Potts et al. discloses classifying the detected segment as face or none face based on whether the size of the face segment corresponds to a default size of a typical or preselected standard head given the camera range value (col. 10, lines 41-48). Potts never recited that the camera range value is a distance between the object and the camera, "camera range value" can read on distance range as well as focus range as well as scale between limits. Secondly, Sethi et al. discloses classifying the face according to the shot type. Sethi defines "shot type" as referring to the gradation of distance between the camera and the recorded scene and that although there are infinite gradations, there are five shot types and that these gradations do not imply a fixed measurable distance in each case but rather defined with respect to the subject being recorded (page 4, lines 10-14). Sethi discloses that simply comparing the magnitude of changes of an object movement in a close up shot

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with that in a medium or long shot is not appropriate unless the comparison is normalized and that such normalization requires a priori knowledge of the distance (page 4, lines 16-21), i.e., it is impossible to compare the magnitude of an object movement in a close up shot with that in a long shot unless the comparison is normalized, such normalization requires the knowledge of distance. Nowhere in Sethi there is a recitation that classification of the video images according to shot types is dependent on distance of the shot type. Thirdly, Applicant's disclosure as originally filed (as explained in detail below) neither explained anywhere, how the classification of the image based on size of the face in the image (which inherently is dependant on the distance between the camera and the object, because the more the distance between the camera and the object the more the object size is reduced in the image) nor how the classification of the image based on shot types (which is by definition is the gradation of distance between the camera and the recorded scene) is made independently of any distance between the face and the camera.

Applicant alleges, "Moreover, with respect to [,]" (page 24, line 21-page 25, line 21). The Examiner disagrees. Firstly, Potts clearly is detecting the location of segments that may contain a face in the frame and measures the offset of the location of the detected face segments from a predetermined reference point (center of the video image), i.e., relative position of the face segment is determined (col. 7, lines 59-65, col. 8, line 60-col. 9, line 2) and the segments that may contain faces are classified as face or none face based on its motion pixels (location) (col. 9, lines 37-46), i.e., relative location of pixels in the

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face segment to be classified is used for classifying the segment. Secondly, the Examiner cannot find anywhere in the claim language of claims 16 and 86 “where two images each have a face of the same size and those faces are in the top and bottom respectively of the image frame, then those images will not be classified according to the same shot type” or the description at pages 8 and 9.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1- 87 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites, “classifying the image according to one of a number of shot types based on the relative size of the face with respect to the image independently of a distance measure between the face and a capture device that recorded the digital image” on lines 5-7. Nowhere in the specification as originally filed there is a recitation of “classifying the image according to one of a number of shot types based on the relative size of the face with respect to the image independently of a distance measure between the face and a capture device that recorded the digital image”. As a matter of fact the specification as originally filed does not show any where how classifying the face according to the shot type

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which is by definition “shot type refers to the gradation of distance between the camera and the face” is performed independently of a distance measure between the face and a capture device that recorded the digital image. Also the specification as originally filed does not show anywhere how classifying the face based on the relative size of the face with respect to the image which inherently is dependant on the distance between the camera and the face (because the more the distance between the camera and the face the smaller the face size in the recorded image) is performed independently of a distance measure between the face and a capture device that recorded the digital image.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-87 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “classifying the image according to one of a number of shot types based on the relative size of the face with respect to the image independently of a distance measure between the face and a capture device that recorded the digital image” on lines 5-7. It is not clear how classifying the face according to the shot type which is by definition “shot type refers to the gradation of distance between the camera and the face”, i.e., shot type is distance dependent, can be performed independently of a distance measure between the face and a capture device that recorded the digital image. Also it is not clear how

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classifying the face based on the relative size of the face with respect to the image which inherently is dependant on the distance between the camera and the face (because the more the distance between the camera and the face the smaller the face size in the recorded image), i.e., face size in the image is distance dependent, can be performed independently of a distance measure between the face and a capture device that recorded the digital image.

### ***Drawings***

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “classifying the image according to one of a number of shot types based on the relative size of the face with respect to the image independently of a distance measure between the face and a capture device that recorded the digital image “ (see paragraph 5 above) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional

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replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

9. Figures 1A to 1G, 2A to @C, 3A, 3B, and 4A to 4E should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

As best understood by the Examiner from the originally filed specification, the following art rejection applies to the claims.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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11. Claims 1, 2, 3, 4, 6, 7, 11- 17, 24-26, 29-33, 37, 39, 41-45, 51-55, 59, 63-68, and 83-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potts et al. (6,593,956) in view of Sethi et al. ("A Statistical Approach to Scene Change Detection") and in further view of Murphy ("Digital Document Metadata in Organizations: Roles, Analytical Approaches, and Future Research Directions"). The grounds for rejections stated in paragraph 3 of the Office Action mailed on 07/15/2004 paper number 5, are incorporated by reference herein.

12. Claims 34-36 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potts et al. (6,593,956), Sethi et al. ("A Statistical Approach to Scene Change Detection"), and Murphy ("Digital Document Metadata in Organizations: Roles, Analytical Approaches, and Future Research Directions") as applied to claims 32 and 55 above, and further in view of Morag (6,324,545). The grounds for rejections stated in paragraph 4 of the Office Action mailed on 07/15/2004 paper number 5, are incorporated by reference herein.

13. Claims 5/1, 5/2, 8/1, 8/2, 9/1, 9/2, 10/1, 10/2, 18/16, 18/17, 19/16, 19/17, 20/16, 20/17, 21/16, 21/17, 22/16, 22/17, 23/16, 23/17, 27, 28, 38, 40, 46-49, 50, 60-62, and 69- 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potts et al. (6,593,956), Sethi et al. ("A Statistical Approach to Scene Change Detection"), and Murphy ("Digital Document Metadata in Organizations: Roles, Analytical Approaches, and Future Research Directions") as applied to claims 1, 2, 7, 16, 17, 39, 45, 59 and 68 above, and further in view of Chandler (*the 'Grammar' of Television and Film*). The grounds for rejections stated in

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paragraph 5 of the Office Action mailed on 07/150/2004 paper number 5, are incorporated by reference herein.

14. Claims 80-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potts et al. (6,593,956), Sethi et al. ("A Statistical Approach to Scene Change Detection"), Murphy ("Digital Document Metadata in Organizations: Roles, Analytical Approaches, and Future Research Directions") and Chandler (*the 'Grammar' of Television and Film*) as applied to claim 79 above, and further in view Morag (6,324,545). The grounds for rejections stated in paragraph 6 of the Office Action mailed on 07/150/2004 paper number 5, are incorporated by reference herein.

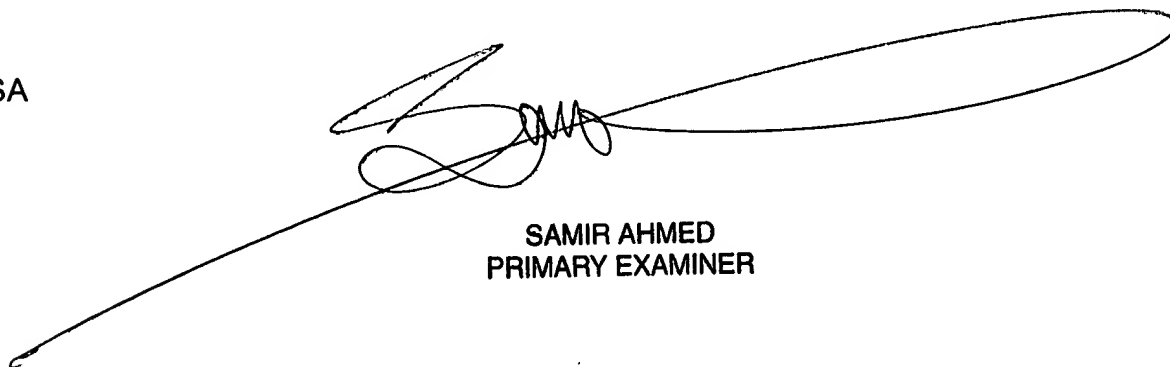
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir A. Ahmed whose telephone number is (571) 272-7413. The examiner can normally be reached on Mon-Fri 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

**SAMIR AHMED  
PRIMARY EXAMINER**